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16

RAW SEQUENCE LISTING DATE: 12/19/2003 PATENT APPLICATION: US/09/680,121C TIME: 16:00:51

Input Set : A:\Amended Sequence Listing for 107-206-C-D.txt

Output Set: N:\CRF4\12192003\I680121C.raw

```
3 <110> APPLICANT: FRENCH, Cynthia K.
        YAMAMOTO, Karen K.
        EL SHAMI, A. Said
 7 <120> TITLE OF INVENTION: Prostate Cancer-Specific Marker
9 <130> FILE REFERENCE: 107-206-C-D
11 <140> CURRENT APPLICATION NUMBER: 09/680,121C
12 <141> CURRENT FILING DATE: 2000-10-04
14 <150> PRIOR APPLICATION NUMBER: 60/041,246
15 <151> PRIOR FILING DATE: 1997-03-07
17 <150> PRIOR APPLICATION NUMBER: 60/047,811
18 <151> PRIOR FILING DATE: 1997-05-15
20 <150> PRIOR APPLICATION NUMBER: 09/036,315
21 <151> PRIOR FILING DATE: 1998-03-06
23 <150> PRIOR APPLICATION NUMBER: 09/535,597
24 <151> PRIOR FILING DATE: 2000-03-27
26 <150> PRIOR APPLICATION NUMBER: 09/680,121
27 <151> PRIOR FILING DATE: 2000-10-04
29 <160> NUMBER OF SEQ ID NOS: 27
31 <170> SOFTWARE: PatentIn Ver. 2.1
                                                    ENTERED
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 3891
35 <212> TYPE: DNA
36 <213> ORGANISM: Homo sapiens
38 <220> FEATURE:
39 <221> NAME/KEY: CDS
40 <222> LOCATION: (151)..(1425)
42 <220> FEATURE:
43 <223> OTHER INFORMATION: product = Repro-PC-1.0
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48 cgttccgaaa gccggcgctt gagatccagg caagtgaatc cagccaggca gttttccctt 120
50 cagcacctcg gacagaacac gcagtaaaaa atg gct ccg atc acc acc agc cgg
                                    Met Ala Pro Ile Thr Thr Ser Arg
51
                                                                     222
54 gaa gaa ttt gat gaa atc ccc aca gtg gtg ggg atc ttc agt gca ttt
55 Glu Glu Phe Asp Glu Ile Pro Thr Val Val Gly Ile Phe Ser Ala Phe
                            15
58 ggc ctg gtc ttc aca gtc tct ctc ttt gca tgg atc tgc tgt cag aga
                                                                     270
59 Gly Leu Val Phe Thr Val Ser Leu Phe Ala Trp Ile Cys Cys Gln Arg
                                            35
60 25
                        30
62 aaa tca tcc aag tct aac aag act cct cca tac aag ttt gtg cat gtg
                                                                     318
63 Lys Ser Ser Lys Ser Asn Lys Thr Pro Pro Tyr Lys Phe Val His Val
64
                    45
                                        50
```

Input Set: A:\Amended Sequence Listing for 107-206-C-D.txt
Output Set: N:\CRF4\12192003\I680121C.raw

	Output Set. N. (CRF4/12132005/10001216.1aw																
66	ctt	aaα	gga	att	gat	att	tac	cct	gaa	aac	cta	aat	agc	aaa	aaq	aaq	366
	Leu																
68		-1-	- 4	60	-		-		65					70	-	-	
70	ttt	gga	gca	gat	gat	aaa	aat	gaa	gta	aag	aat	aag	сса	gct	gtg	cca	414
	Phe																
72		-	75		_			80					85				
74	aag	aat	tca	ttg	cat	ctg	gat	ctt	gaa	aag	aga	gat	ctc	aat	ggc	aat	462
75	Lys	Asn	Ser	Leu	His	Leu	Asp	Leu	Glu	Lys	Arg	Asp	Leu	Asn	Gly	Asn	
76		90					95					100					
	ttt																510
	Phe	Pro	Lys	Thr	Asn		Lys	Pro	Gly	Ser		Ser	Asp	Leu	Glu		
	105					110					115					120	
	gca																558
	Ala	Thr	Pro	Lys		Phe	Leu	Glu	Gly		Lys	Glu	Ser	Val		Pro	
84					125					130					135		606
	gag																606
	Glu	Ser	Leu		Ser	Ser	Thr	Ser		Thr	Ser	GIU	GLU		GIN	GIU	
88				140				+ ~ ~	145	~~~	+	220	++0	150	202	222	654
	aag Lys																0.74
91	гуу	ьец	155	IIIL	ьeu	rne	rne	160	теп	GIU	ıyı	ASII	165	Giu	Arg	БУЗ	
	gca	+++		atc	aat	atc	aan		acc	cat	aac	tta		acc	ato	gat	702
	Ala																
96	1114	170	• • •	• • • •	11011		175	010		9	027	180					
-	qaq		tca	atα	acc	tct	qac	сса	tat	atc	aaa	atq	acq	atc	ctc	cca	750
	Glu																
	0 185					190			-		195					200	
																g gat	798
10	3 Glu	ı Lys	s Lys	s His	s Lys	va.	Lys	Th	c Arc	y Val	. Lei	ı Arç	J Lys	Thi		Asp	
10					205					210					21		
																caa	846
) Ala	a Phe			ı Thi	: Phe	Th			: Gl	/ Ile	e Pro			r Gln	
10				220					225				- 4-4-4	230			0.04
11	0 ato	caa	a gaa	a tto	g gcc	tto	g cad	י דני	c aca	att		g agu	ב דנו - האם	gad	age	g ttt	894
		e GII			ı Ala	а тел	ı Hls			. TTE	e rer	ı sei	245) Ar	g Phe	
11.			23!				. ~~.	240			·	- 001				a a++	942
11	4 LCa	a dy	a ya	L gai	L dl(. Tl	- 999	, Cl	ı yı	Lo	ı alı	Dra	LOU	, CO	y 999	a att y Ile	742
11		250		J ASI	7 TT6		255			. пес				1 561	. 01	y iie	
				- a a:	- 44:									r ato	. aa	g aga	990
																s Arg	,,,,
	0 265			. 01	u O	270					275					280	
			- ago	а аас	a tot			a cad	a aat	: gac			ato	tct	t cto	tgc	1038
																ı Cys	
12				. — <u>.</u> .	285		,	;	,ı	290					29		
		cad	g tc	c acc			act	. cta	a act	gto	gtt	gto	c tta	a aaa	a gct	cga	1086
																a Arg	
12									305					310		_	
	В			300	J				50.	,				211	,		
		cto	g cci			gat	gto	j tc			tca	a gat	cco		_	c aaa	1134

Input Set : A:\Amended Sequence Listing for 107-206-C-D.txt

Output Set: N:\CRF4\12192003\I680121C.raw

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131 His Leu Pro Lys Ser Asp Val Ser Gly Leu Ser Asp Pro Tyr Val Lys
                                320
132
            315
134 gtg aac ctg tac cat gcc aaa aag aga atc tcc aag aag aag act cat
                                                                      1182
135 Val Asn Leu Tyr His Ala Lys Lys Arg Ile Ser Lys Lys Thr His
                                                340
                            335
138 gtg aag aaa tgc acc ccc aat gca gtg ttc aat gag ctg ttt gtc ttt
                                                                      1230
139 Val Lys Lys Cys Thr Pro Asn Ala Val Phe Asn Glu Leu Phe Val Phe
140 345
                        350
142 gat att cct tgt gag ggc ctt gaa gat ata agt gtt gaa ttt ttg gtt
                                                                      1278
143 Asp Ile Pro Cys Glu Gly Leu Glu Asp Ile Ser Val Glu Phe Leu Val
                                        370
                    365
                                                                      1326
146 ttg gat tct gaa agg ggg tcc cga aat gag gta atc ggg cag tta gtc
147 Leu Asp Ser Glu Arg Gly Ser Arg Asn Glu Val Ile Gly Gln Leu Val
                380
                                    385
                                                                      1374
150 ttg ggt gca gca gaa gga act ggt gga gag cac tgg aaa gag atc
151 Leu Gly Ala Ala Ala Glu Gly Thr Gly Gly Glu His Trp Lys Glu Ile
152
            395
                                400
154 tgt gac tac ccc agg aga caa att gcc aag tgg cac gtg ctc tgt gat
                                                                      1422
155 Cys Asp Tyr Pro Arg Arg Gln Ile Ala Lys Trp His Val Leu Cys Asp
                            415
                                                420
        410
                                                                      1475
158 ggt tagcatccta gccgtgagtt ggaacttaaa ggtttttact aggcaaggag
159 Gly
160 425
162 aaattttctt tctttctata ttggattgca agcttgggaa atcaagctac ctttttgttg 1535
164 ttgttgttgt tgctagaaat ggattgaatt agtagaccag aaagtaactt caaatgtgta 1595
166 ttatgataat ttccctattt attagaagag ttggataaat tttcataaga tattcaatat 1655
168 ctccttcaga ttaccagtga tataactagg aatagtcaga cattttatga atactgtgcc 1715
170 agaatcccaa attataaatg tgacaatctc attggaacat gtcacaaaaa gttaatgtga 1775
172 ttaagattta aaaacgaaaa gtatgccttg ccttgtgaaa atttatccat ttatcttcag 1835
174 gttgggggaa atcaatttt ctttaatcca aagatactaa aaaaatgtcc tccagtttgt 1895
176 atttattaat tetgteatgt geaaatggtt gteetgeata taaaagtate tggteattte 1955
178 agtttggttt gtaattattt gatgcaattt tatcataaga gtaactcaga ttcatttcaa 2015
180 aaqqacaqtq aacaaqctga gaaattattt tatcaaaggg ctgagttgag aacactgtgg 2075
182 ctgaaatata atttttctcc cccctaaggt tacatgtgag tcaaaatttt gtaaaatata 2135
184 acctcacata agaaccatgg ccttggatta ttcactgcct gtcacaagcc tcagtgtggc 2195
186 ctqaqaaatc cctatqtacc tttqtgaaat tgttgaatta gttagtgaat aaagaaataa 2255
188 acttcaacta qaaatccaqt tagaagtgca attttcttat aggaaatagg tatagtgtgc 2315
190 aagtgtactt ttaaggccat cgtttgtacc cagagtcggc atggccacct aagtcttcat 2375
192 ttaatttatt gtcccccaga aaagattaag atgctacttg aaaagactgt gaagattttt 2435
194 tacattgcca gataaaaagt gttacttaac caacaaacaa atgtaagact acaaaatcgt 2495
196 tcaagagcaa ttctaatata atttacatat gttcacgcaa aatatgctta ggctgtcaaa 2555
198 ttagcacaac aaagaatgtg tttcactatc ttttctaggc taatttgtct tgagctgttg 2615
200 tctatagagc agtttacaga cttgtgtctt gtatcatttt ccagtgccag ggttctgaaa 2675
202 ttcattcaga acctgttaga ttaaagctgc accctgtgat tatttgaaaa gaattagctt 2735
204 gagagtaatg tcactatatt tgagttetta gagaagtatg agtggaaett gagtacagtt 2795
206 gaattattaa atatgcaagt tagaaattaa gtctactgaa aaatttacat tttgagtcag 2855
208 gttttgtgtc agtactttag cagtttttga gaatgtgttt gatatcacag tgtttgtaaa 2915
210 ttctatgaaa aatgcatttt ccaaacaact tatacatgct ttttatgact atgcctaatg 2975
212 taaagaaaat gtattacatt ctgtatgtac aaagattaaa aatcaacctc ttttttgtgc 3035
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Input Set: A:\Amended Sequence Listing for 107-206-C-D.txt
Output Set: N:\CRF4\12192003\1680121C.raw

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214 tttaaaatga ctttgggatt aaaaaagcat atttcccaat cattgtcttc attccactac 3095
 218 ctgtagtagg tgtgtagttt ggggaagtca aatggccatt ttatgtatgt gcatttggta 3215
 220 tcatgggccg tggaacagaa tatatgttgg acctctgaaa agttgtaagg ggccaaatct 3275
 222 aaqtattett caeggeagee agaagttaat ggtggtagea getgaggtat ggttgttgga 3335
 224 cgaggccgat ttttttttt taacatggaa caatgaaacc aacaacaaac atttttaaaa 3395
 226 ttaaaatgga taatttgtaa atagttttta gcttttaaaa tttaaagtgt ttttgagtgt 3455
 228 gaaaagttga gtaaaactat ttgcaactgg ttttcagaaa agagaaaaga aacaacaaag 3515
 230 gaattgaaac aggcagggag atcttaatac ctaatttcat catttctgca aaatgtactg 3575
 232 ttttagaatg tattacaata tcaatgtgaa tatcttgaat cctgttacaa atcctgcact 3635
 234 qtattaaaca tqtaaattaa ttqtttqtct gattagccaa tctcaccacc caaatgggga 3695
 236 ggtatacatg tttgaagaac gtgtaactcg gtaattgatt tgttctgatg ttgtaactca 3755
 238 atagaagtgt tttggaagga agcatggtgt gtgagacagt gtctgttctt ttgtgccagc 3815
 240 tetgtatgat gtttgtaaga eeatgtttgt aagacatgaa taaattgetg ettttgeeca 3875
                                                                      3891
 242 aaaaaaaaaa aaaaaa
 245 <210> SEQ ID NO: 2
 246 <211> LENGTH: 425
 247 <212> TYPE: PRT
 248 <213> ORGANISM: Homo sapiens
> 249 <220> FEATURE:
  250 <223> OTHER INFORMATION: product = Repro-PC-1.0
  252 <400> SEQUENCE: 2
 253 Met Ala Pro Ile Thr Thr Ser Arg Glu Glu Phe Asp Glu Ile Pro Thr
 256 Val Val Gly Ile Phe Ser Ala Phe Gly Leu Val Phe Thr Val Ser Leu
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 259 Phe Ala Trp Ile Cys Cys Gln Arg Lys Ser Ser Lys Ser Asn Lys Thr
 260
                                  40
 262 Pro Pro Tyr Lys Phe Val His Val Leu Lys Gly Val Asp Ile Tyr Pro
 265 Glu Asn Leu Asn Ser Lys Lys Phe Gly Ala Asp Asp Lys Asn Glu
                          70
                                              75
 268 Val Lys Asn Lys Pro Ala Val Pro Lys Asn Ser Leu His Leu Asp Leu
                      85
                                          90
  271 Glu Lys Arg Asp Leu Asn Gly Asn Phe Pro Lys Thr Asn Leu Lys Pro
 272
                 100
  274 Gly Ser Pro Ser Asp Leu Glu Asn Ala Thr Pro Lys Leu Phe Leu Glu
                                 120
  277 Gly Glu Lys Glu Ser Val Ser Pro Glu Ser Leu Lys Ser Ser Thr Ser
                                                 140
         130
                             135
  280 Leu Thr Ser Glu Glu Lys Gln Glu Lys Leu Gly Thr Leu Phe Phe Ser
                         150
                                             155
  283 Leu Glu Tyr Asn Phe Glu Arg Lys Ala Phe Val Val Asn Ile Lys Glu
                                         170
                     165
 286 Ala Arg Gly Leu Pro Ala Met Asp Glu Gln Ser Met Thr Ser Asp Pro
                 180
                                     185
 289 Tyr Ile Lys Met Thr Ile Leu Pro Glu Lys Lys His Lys Val Lys Thr
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200

292 Arg Val Leu Arg Lys Thr Leu Asp Pro Ala Phe Asp Glu Thr Phe Thr

195

Input Set : A:\Amended Sequence Listing for 107-206-C-D.txt

Output Set: N:\CRF4\12192003\I680121C.raw

```
293
                            215
        210
295 Phe Tyr Gly Ile Pro Tyr Thr Gln Ile Gln Glu Leu Ala Leu His Phe
                        230
                                            235
296 225
298 Thr Ile Leu Ser Phe Asp Arg Phe Ser Arg Asp Asp Ile Ile Gly Glu
                                        250
                    245
301 Val Leu Ile Pro Leu Ser Gly Ile Glu Leu Ser Glu Gly Lys Met Leu
                                    265
                260
302
304 Met Asn Arg Glu Ile Ile Lys Arg Asn Val Arg Lys Ser Ser Gly Arg
307 Gly Glu Leu Leu Ile Ser Leu Cys Tyr Gln Ser Thr Thr Asn Thr Leu
                                                 300
                            295
310 Thr Val Val Val Leu Lys Ala Arg His Leu Pro Lys Ser Asp Val Ser
                        310
                                             315
313 Gly Leu Ser Asp Pro Tyr Val Lys Val Asn Leu Tyr His Ala Lys Lys
                    325
                                        330
316 Arg Ile Ser Lys Lys Lys Thr His Val Lys Lys Cys Thr Pro Asn Ala
317
                340
                                    345
319 Val Phe Asn Glu Leu Phe Val Phe Asp Ile Pro Cys Glu Gly Leu Glu
                                360
            355
322 Asp Ile Ser Val Glu Phe Leu Val Leu Asp Ser Glu Arg Gly Ser Arg
                            375
325 Asn Glu Val Ile Gly Gln Leu Val Leu Gly Ala Ala Ala Glu Gly Thr
                        390
                                             395
328 Gly Gly Glu His Trp Lys Glu Ile Cys Asp Tyr Pro Arg Arg Gln Ile
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                                        410
331 Ala Lys Trp His Val Leu Cys Asp Gly
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336 <210> SEQ ID NO: 3
337 <211> LENGTH: 21
338 <212> TYPE: DNA
339 <213> ORGANISM: Homo sapiens
341 <220> FEATURE:
342 <221> NAME/KEY: misc feature
343 <222> LOCATION: (1)..(21)
344 <223> OTHER INFORMATION: 5' oligo (109) Upper Primer
346 <400> SEQUENCE: 3
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347 cagttttccc ttcagcacct c
350 <210> SEQ ID NO: 4
351 <211> LENGTH: 30
352 <212> TYPE: DNA
353 <213> ORGANISM: Homo sapiens
355 <220> FEATURE:
356 <221> NAME/KEY: misc_feature
357 <222> LOCATION: (1)..(30)
358 <223> OTHER INFORMATION: 3' oligo (3489) Lower Primer
360 <400> SEQUENCE: 4
                                                                       30
361 ttcctttgtt gtttcttttc tcttttctga
364 <210> SEQ ID NO: 5
365 <211> LENGTH: 425
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Input Set : A:\Amended Sequence Listing for 107-206-C-D.txt

Output Set: N:\CRF4\12192003\1680121C.raw

ase Note:

of n and/or Xaa have been detected in the Sequence Listing. Please review the uence Listing to ensure that a corresponding explanation is presented in the <220> <223> fields of each sequence which presents at least one n or Xaa.

```
#:11; Xaa Pos. 1,2,3,4,5,6,7,8

#:12; Xaa Pos. 1,2,3,4,5,6,7,8,9

#:13; Xaa Pos. 1,2,3,4,5,6

#:14; Xaa Pos. 1,2,3,4,5,6,7

#:15; Xaa Pos. 1,2,3,4,5,6,7,8,9

#:16; Xaa Pos. 1,2,3,4,5,6,7,8,9,10

#:17; Xaa Pos. 1,2,3,4,5,6,7,8

#:18; Xaa Pos. 1,2,3,4,5,6,7,8,9

#:19; Xaa Pos. 1,2,3,4,5,6,7,8,9

#:20; Xaa Pos. 1,2,3,4,5,6,7,8,9

#:27; Xaa Pos. 5
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/680,121C

Input Set: A:\Amended Sequence Listing for 107-206-C-D.txt
Output Set: N:\CRF4\12192003\I680121C.raw

DATE: 12/19/2003

TIME: 16:00:52

49 M:283 W: Missing Blank Line separator, <220> field identifier 46 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11 55 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11 64 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11 73 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0 83 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12 92 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12 01 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12 10 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0 20 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13 29 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13 39 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0 49 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14 58 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14 67 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0 77 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 86 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 96 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 05 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 14 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0 24 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16 33 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16 43 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16 52 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16 61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0 71 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17 80 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17 89 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17 98 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0 08 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18 17 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18 26 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18 35 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0 45 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19 54 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19 63 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19 72 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19 81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0 91 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20 000 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20 009 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20 018 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0 121 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:27

130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0